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(54) **PEDICLE SCREW ASSEMBLY AND DYNAMIC SPINAL STABILIZATION DEVICES INCORPORATING THE PEDICLE SCREW ASSEMBLY**

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This patent is subject to a terminal disclaimer.

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(58) **Field of Classification Search**

CPC A61B 17/7032; A61B 17/7034; A61B 17/7035; A61B 17/7046; A61B 17/86; A61B 17/8605

See application file for complete search history.

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(57) **ABSTRACT**

A dynamic spinal stabilization device for the treatment of high-grade spinal disorders is disclosed herein. The dynamic spinal stabilization device includes two or more screw assemblies, each of which include a pedicle screw and a head socket containing a curved internal track that limits the range of motion and center of rotation of the spinal segments stabilized using the device to the physiological levels of a nondegraded spinal segment.

21 Claims, 17 Drawing Sheets

